

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. At the time of the outstanding Office Action, claims 1-20 were pending. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Prior Art Rejections:

Claims 1 and 4-8 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2005/0086645 to Diao et al. (hereinafter “Diao”). Claims 2, 3 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diao in view of U.S. patent 6,678,639 to Little et al. (hereinafter “Little”). These rejections are respectfully traversed for at least the reasons below.

Independent claim 1 recites method of adjusting relative value of implemented computer configuration changes. The method includes “identifying computer configuration changes in a computer system,” “obtaining performance metrics for the computer system before and after computer configuration changes implemented in the computer system” and “assessing effectiveness of the computer configuration changes based on the obtained performance metrics.” Independent claims 9 and 17 recite analogous features.

With regards to the feature of identifying computer configuration changes, obtaining performance metrics, and assessing effectiveness of configuration changes, the Examiner points to the following passages of Diao:

“Control logic 124 within controller 120 gets a performance report (step 210 of FIG. 2A) from probe 114 through the common interface (118 and 128). If this is the first performance report (step 211 of FIG. 2B) then control logic 124 requests (through generic resource interface 130 using the common interface 128 and 112 which is interpreted by that resource's translator 110) a list of performance metrics from all resources (step 212 of FIG. 2B). Each resource 108 returns through their translator 110 a list of performance metrics to control logic 124. Control logic 124 then queries each performance metric for every resource within control domain 104 (step 213 of FIG. 2B). Thus, control logic 124 has the overall system performance from probe 114 and each monitored resource 108 in the system.” (paragraph 0049; emphasis added)

Thus, Diao teaches that the control logic obtains a performance report that details overall system performance and performance of each resource in the system. The Examiner utilizes step 210 in this passage to teach obtaining performance metrics before a configuration change. Diao further teaches:

“Control logic 124 then compares the system and/or individual resource performance (step 220 of FIG. 2A) to the performance goal(s) set by the administer (step 221 of FIG. 2C) and logs the performance goal(s) and metrics (step 222 of FIG. 2C). If the performance goals are being met (step 223 of FIG. 2C) then control logic 124 may wait for some period of time or immediately request another performance report (step 224 of FIG. 2C). If the goals are not being met then control logic 124 will determine a new configuration (step 230 of FIG. 2A) for any set of resources needing a change in configuration parameters to improve overall system performance.

If this is the first configuration change (step 231 of FIG. 2D) **then control logic 124 requests (through generic resource interface 130 using the common interface 128 and 112 which is interpreted by that resource's translator 110) a list of configuration parameters from all resources (step 232 of FIG. 2D).** Each resource 108 returns through their translator 110 a list of configuration parameters to control logic 124. **Generic resource interface 130 then groups (categorizes) the configuration parameters into like kinds (step 233 of FIG. 2D).** For example, all memory configuration parameters may be grouped together.” (paragraphs 0050 and 0051; emphasis added)

Thus, Diao teaches comparing resource performance to set goals. Performance reviews are done after some period of time, or immediately following the previous performance review. The Examiner utilizes this passage to teach identifying computer configuration changes. However, there is no teaching or suggestion in this passage, or anywhere else in Diao of identifying computer configuration changes. Rather, Diao discloses comparing resource performance to resource performance goals. There is no teaching or suggestion of identifying any type of configuration change in Diao. The next few paragraphs of Diao teach how configuration parameters are changed in response to whether the performance resource goals are met:

“Then, control logic 124 determines which configuration parameters on which resources need to be modified (step 240 of FIG. 2D). If this is the first time a change is being made to the resource parameters or if control logic 124 has determined that the previous model used to make

configuration changes is no longer valid (step 241 of FIG. 2E) then **control logic 124 uses the previous performance history and previous configurations to build a new model of the system** (step 242 of FIG. 2E). Once the model is built, **the model is used to determine the configuration settings for any or all of the generically controlled resources** (step 243 of FIG. 2E).

Control logic 124 then causes the resources to change configuration (step 250 of FIG. 2A). That is, the resources are told by control logic 124 to update their configuration parameters through generic resource interface 130 using the common interface 128 and 112 which is interpreted by each resource's translator 110 (step 251). **Once all of the changes are made, the new configuration is kept (logged) to build new models in the future** (step 252)." (paragraphs 0052 and 0053; emphasis added)

Thus, based upon the resource parameters obtained when resource performance goals are not met, the control logic determines which configuration parameters on which resources need to be changed. Previous performance history and configurations are used to determine new configuration settings. The control logic then causes the resources to change configuration and logs those new configurations to build future models. The Examiner utilizes step 250 to teach obtaining performance metrics after a configuration change. However, step 250 teaches changing the configuration of one or more resources, as instructed by the control logic. There is no teaching or suggestion in this passage, or anywhere else in the disclosure of Diao, of obtaining performance metrics after a configuration change.

There is a distinct difference between reconfiguring system resources if performance of a system does not meet its goals, and determining how a resource configuration has affected a system. The Examiner utilizes the following passage to teach assessing the effectiveness of computer configuration changes based upon the metrics obtained before and after a computer configuration:

"In another aspect of the invention, a method of providing a service for generically controlling one or more resources associated with at least one computing system comprises a service provider deploying a system operative to: (i) evaluate one or more performance metrics associated with the one or more resources given one or more configurations of the one or more resources; and (ii) cause a change in the one or more configurations of the one or more resources based on the performance metric evaluating step; wherein the one or more performance metrics and the one or more configurations are expressed in generic formats." (paragraph 0012; emphasis added)

Here, Diao teaches evaluating performance metrics associated with one or more resources given a configuration of that resource and changing the configuration based upon the performance evaluation. There is no teaching or suggestion herein that the performance of the system after the configuration change is determined, and thus the effectiveness of the configuration change is assessed. Rather, Diao teaches that current system resource performances are reported and changes are made to resource configurations as necessary. The effectiveness of that change is never explicitly analyzed in Diao, as required by the invention as claimed.

Thus, Diao fails to teach or disclose a method of adjusting relative value of implemented computer configuration changes that includes “identifying computer configuration changes in a computer system,” “obtaining performance metrics for the computer system before and after computer configuration changes implemented in the computer system” and “assessing effectiveness of the computer configuration changes based on the obtained performance metrics.” If this rejection is maintained, the Examiner is respectfully requested to point out where these features can be found in Diao.

Dependent claims 2-9 are also patentable for at least the same reasons as independent claim 1 on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole. As mentioned above, Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

Claims 2, 3 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diao in view of Little. Little fails to make up for the deficiencies of Diao as detailed above.

Independent claim 9 recites a system configured to “identify implemented configuration changes in the computer system,” “collect performance metrics associated with the computer system having the identified implemented configuration changes” and “weight effectiveness of the identified implemented configuration changes.” Independent claim 17 recites analogous features. The Examiner asserts that Diao teaches all of the features of independent claim 9, with the exception of weighting effectiveness of identified implemented configuration changes. However, as detailed above, Diao fails to teach identifying configuration changes in the system. Further, as shown above, Diao collects performance

metrics on all of the resources of the system. There is no teaching or disclosure in Diao of collecting performance metrics associated with a specific group, such as metrics associated with a system having the identified implemented configuration changes. Thus, Diao fails to teach or disclose both of these features of the invention as claimed. Diao also fails to teach or suggest weighing the effectiveness of the identified implemented configuration changes, as the Examiner correctly notes.

Little fails to make up for the deficiencies of Diao as detailed above. Little teaches an automated problem identification system. A computing environment is analyzed and compared to an internal rules database. The internal rules database contains the various problems that are known to exist on different configurations of the computing environment. (Abstract) Little teaches generating a prioritized list of problems or non-optimized aspects of the system and listing them in order of severity. (column 2, lines 9-42) There is no teaching or suggestion in Little of a system configured to “identify implemented configuration changes in the computer system,” “collect performance metrics associated with the computer system having the identified implemented configuration changes” and “weight effectiveness of the identified implemented configuration changes.”

Little does not discuss configuration changes. Rather, Little looks at the current state of the computing environment and identifies issues with the computing environment with regards to the internal rules database. There is no teaching or suggestion in Little of comparing the same computing environment with different configurations, or of weighting the effectiveness of a configuration change that has been implemented. Thus, Little also fails to teach the features of the invention as claimed. If this rejection is maintained, the Examiner is respectfully requested to point out where these features are found in either Diao or Little.

Dependent claims 10-16 and 18-20 are also patentable for at least the same reasons as the independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole. As mentioned above, Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

Conclusion:

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. **08-2025**. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. **08-2025**.

Respectfully submitted,

Date 6/5/08

HEWLETT PACKARD
Customer Number: 22879
Telephone: (202) 672-5485
Facsimile: (202) 672-5399

By 

William T. Ellis
Attorney for Applicant
Registration No. 26,874

Ramya Ananthanarayanan
Agent for Applicant
Registration No. 59,597